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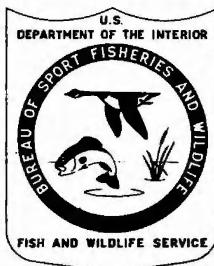
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## COMPREHENSIVE BIBLIOGRAPHY OF Zostera marina

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## COMPREHENSIVE BIBLIOGRAPHY OF Zostera marina

In the course of research on eelgrass, Zostera marina L., a large bibliography was compiled on a worldwide basis. An attempt was made to make the reference list as complete as possible. References are listed alphabetically by authors.

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### BIBLIOGRAPHIC LIST

ABRAMS, L.

1940. Illustrated flora of the Pacific States. Vol. I. Stanford Univ. Press, Stanford, Calif.

ADAMS, J.

1933. Zostera marina on Anticosti Island. Nature, 132: 752.

ADDY, C. E.

1947a. Eelgrass planting guide. Maryland Conservationist, 24: 16-17.

1947b. Germination of eelgrass seed. Jour. Wildl. Mgt., 11: 279.

ADDY, C. E., and D. A. AYLIWARD.

1944. Status of eelgrass in Massachusetts during 1943. Jour. Wildl. Mgt., 8(4): 269-275.

ADDY, C. E., and R. H. JOHNSON

1948. Status of eelgrass along the Atlantic Coast during 1947. In Proceedings, Northeastern Game Conference, p. 73-78.

ALEEM, A. A., and G. PETIT.

1952. Caracteristiques et evolution de la vegetation d'un etang des Pyrenees Orientales. Acad. des Sci. Compt. Rend., Paris, 235: 632-634.

ALLEE, W. C.

1923a. Studies in marine ecology. I. The distribution of common littoral invertebrates in the Woods Hole region. Biol. Bull., 44: 167-191.

1923b. Studies in marine ecology. II. An annotated catalogue showing the distribution of common invertebrates of the Woods Hole littoral. Ms. deposited in the following libraries: U.S. Fish Commission at Washington; U.S. National Museum; Scripps Institution at LaJolla; Mount Desert Island Biological Laboratory.

1923c. Studies in marine ecology. III. Some physical factors related to the distribution of littoral invertebrates. Biol. Bull., 44(5): 205-253.

1934. Concerning the organization of marine coastal communities. Ecol. Monogr., 14(4): 541-554.

ANDERSON, J. P.

1959. Flora of Alaska and adjacent parts of Canada. Iowa State Univ. Press, Ames.

ANDERSON, N. J.

1870. Femhundra afbildningar af mera allmant forekommande svenska vaxter. Stockholm.

ARASAKI, M.

1950a. The ecology of Amamo (Zostera marina) and Koamamo (Zostera nana). Bull. Jap. Soc. Sci. Fish., 15(10): 567-572.

1950b. Studies on the ecology of Zostera marina and Zostera nana. II. Bull. Jap. Soc. Sci. Fish., 16: 70-76.

ARBER, A.

1920. Water plants. Cambridge Univ. Press.

1925. Monocotyledons. Cambridge Univ. Press.

ASCHERSON, P.

1867. Vorarbeiten zu einer Übersicht der phanerogamen Meeresgewächse. Linnea, 35: 152-208.

1871. Die geographische Verbreitung der Seegräser. Mitth. aus Justus Perthes' Geographischen Anstalt über wichtige neue Erforschungen auf dem Gesamtgebiete der Geographie von Dr. A. Petermann. 17: 241-248.

1906. Die geographische Verbreitung der Seegräser. In, Neumayer, Anleitung zu wissenschaftlichen Beobachtung auf Reisen. 3d. ed., 2: 398-413. Hanover.

ASCHERSON, P., and P. GRAEBNER.

1907. Potamogetonaceae. In Engler, Pflanzenreich, 4(13): 1-184.

ATKINS, W. R. G.

1938. The disappearance of Zostera marina. Jour. Marine Biol. Assn., 23: 207-210.

BENACCHIO, N.

1938. Thalassia, Vol. 3, No. 3, Osservazioni sistematiche e biologiche sulle zosteracee delle Alto Adriatico.

BERNATOWICZ, A. J.

1952. Marine monocotyledonous plants of Bermuda. Bull. Mar. Sci. Gulf & Carib., 2(1): 338-345.

BIGELOW, J.

1824. A collection of plants of Boston and its vicinity. Cummings Hilliard & Co., Boston.

1840. A collection of plants of Boston and its vicinity. Chas. C. Little & James Brown, Boston.

BLACKBURN, K. B.

1934. Wasting disease of Zostera marina. Nature, 134(3393):738.

BLEGVAD, H.

1914. Food and conditions of nourishment among the communities of invertebrate animals found on or in the sea bottom in Danish waters. Rept. Danish Biol. Sta., 22: 41-78.

1928. Continued studies on the quantity of fish-food in the sea bottom. Rept. Danish Biol. Sta., 31.

1933. En epidemisk sjukdom pa bandtangen (Zostera marina). Ny Svensk Fisk. Tidskr., 18: 205-207.

1934. An epidemic disease of the eel-grass (Zostera marina). Rept. Danish Biol. Sta., 39: 1-8.

1944. The disease of the eel-grass. Rept. Danish Biol. Sta., 45: 56-57.

BOCHER, T. W., K. HOLMEN, and K. JACOBSEN.

1957. Gronlands Flora. P. Haase & Sons, Kobenhavn.

BORCEA, J.

1927. Donnees sommaires sur la fauna de la mer noire (littoral roumain). Ann. Sci. Univ. Jassy, 14(3-4): 536-581.

BRETSCHNEIDER, E.

1881. Botanicum Linicum. Notes on Chinese Botany from native and western sources. Jour. North-China Branch of Royal Asiatic Soc., 16. 1-468.

BRITTON, N. L.

1889. Catalogue of plants found in New Jersey. Final Rept. of State Geologist, vol. II. Trenton, N.J.

1918. Flora of Bermuda. Scribner's, New York.

BUTCHER, R. W.

1933. Report on the present condition of eelgrass on the coast of England. Min. Agr. and Fish. (London). Rept. Dec. 1933.

1934a. Notes on the variation of the British species of Zostera. Bot. Soc. and Exch. Club of the Brit. Isles Rept. (1933), 10: 592-597.

1934b. Zostera. Report on the present condition of eelgrass on the coasts of England, based on a survey during August to October, 1933. Jour. Conseil. Permanent Internat. l'Exploration de la Mer, 9: 49-65.

1935. Wasting disease of Zostera marina. Nature, 135: 545.

1941. The distribution of Zostera and other seashore plants in relation to the migration of wildfowl. International Waterfowl Inquiry, 1: 35. Cambridge Univ. Press.

#### CANADIAN FISHERMAN

1926. The eelgrass industry in Canada. Vol. 13, No. 5, p. 151-152.

#### CASPERS, H.

1951. Quantitative Untersuchungen über die Bodentierwelt des Schwarzen Meeres in bulgarischen Küstenbereich. Arch. Hydrobiol., 45: 1-192.

1957. Black Sea and Sea of Azov. In Treatise on marine ecology and paleoecology. J. W. Hedgpeth, ed., Geol. Soc. Amer., Memoir, 67: 801-889.

#### CHAPMAN, A. W.

1860. Flora of the southern United States (also imprints 1865 and 1872; ed. 2, 1884; ed. 3, 1897). New York.

#### CHAPMAN, V. J.

1940. Studies in salt-marsh ecology. VI and VII. Comparison with marshes on the east coast of North America. Journ. Ecology, 28(1): 118-151.

#### CHRISTIANSEN, M. S. and H. ANTHON.

1958. Danmarks Vilde Planter. Branner og Korch, Kobenhavn.

#### CHRYSLER, MA. A.

1907. The structure and relationships in Potamogetonaceae and allied families. Bot. Gaz., 44: 161-188.

#### CLAPHAM, A. R., T. G. TUTIN, and E. F. WARBURG.

1951. Excursion flora of the British Isles. Cambridge Univ. Press.

1962. Flora of the British Isles. Cambridge Univ. Press.

CLARKE, G. L.

1954. Elements of ecology. John Wiley & Sons, New York.

CLAVAUD, A.

1878. Sur le véritable mode de fécondation du Zostera marina.  
Actes Soc. Linn. Bordeaux, T. 32 (Ser. IV & II): 109-115.

1879. Sur le véritable mode de fécondation du Zostera marina.  
Ann. Soc. Linn. Bordeaux, 4(2). Abstracted in Bot. Ztg.,  
37: 535.

CLEMENTS, F. E., and V. E. SHELFORD.

1939. Bio-ecology. John Wiley & Sons, New York.

CONOVER, J. T.

1958. Seasonal growth of benthic marine plants as related to environmental factors in an estuary. Inst. Mar. Sci., 5: 97-147.

COPE, O. B.

1940. Black brant of San Quintin Bay, Lower California. Calif.  
Fish and Game, 26: 390-392.

COTTAM, CLARENCE

1933a. Eelgrass, valuable sea plant, dying of mysterious diseases.  
Science News Letter, 24: 73.

1933b. Disappearance of eelgrass along the Atlantic coast. Plant  
Dis. Rept., 17(6): 46-53.

1933c. Recent observations on eelgrass conditions. Plant Dis.  
Rept., 17(10): 119-120.

1933d. Further reports on eelgrass conditions. Plant Dis. Rept.,  
17: 142-144.

1934a. Past periods of eelgrass scarcity. Rhodora, 36: 261-264.

1934b. The eelgrass shortage in relation to waterfowl. Amer. Game  
Conf. Trans., 20: 272-279.

1934c. Eelgrass disappearance has serious effects on waterfowl and industry. U.S. Dept. Agr., Yearbook, p. 191-193.

1935a. The eelgrass situation in 1934. Amer. Game Conf. Trans., 21: 295-301.

1935b. The present situation regarding eelgrass (Zostera marina). U.S. Bur. Biol. Surv., Leaflet BS-3.

1935c. Wasting disease of Zostera marina. Nature, 135: 306.

1935d. Further notes on past periods of eelgrass scarcity. Rhodora, 37: 269-271.

1935e. The present eelgrass situation along the American Atlantic coast. Plant Dis. Rept., 19(14): 230-231.

1935f. Seek wildlife improvement in study of eelgrass shortage. U.S. Dept. Agr. press release 1612-35. Feb. 24, 1935.

1938. Status of eelgrass (Zosteramarina) on the North Atlantic coast, Feb. 1938. U.S. Bur. Biol. Surv., Leaflet BS-110.

1939. The eelgrass situation on the American Pacific coast. Rhodora, 41: 257-260.

1941. The eelgrass situation, fall, 1940. Plant Dis. Rept., 25: 46-52.

1945. Eelgrass conditions along the Atlantic seaboard of North America. Plant Dis. Rept., 29(12): 302-310.

COTTAM, C., and C. E. ADDY.

1947. Present eelgrass condition and problems on the Atlantic coast of North America. Twelfth North American Wildlife Conference, San Antonio, tex. 1947.

COTTAM, C., and D. A. MUNRO.

1954. Eelgrass status and environmental relations. Jour. Wildl. Mgt., 18(4): 449-460.

COTTON, A. D.

1933a. Disappearance of Zostera marina. Nature, 132 (3329): 277.

1933b. (Answer to letter of F. M. Duncan). Nature, 132(3334): 483.

1934. Zostera marina in Britain. Bot. Soc. and Exch. Club of the British Isles Rept., 1933, 10: 623-624.

COULTER, J. M., and C. J. CHAMBERLAIN

1903. Morphology of Angiosperms. D. Appleton & Co., New York.

DAHLGREN, K. V. O.

1939. Endosperm und Embryobildung bei Zostera marina. Bot. Not., p. 607-615.

DAVENPORT, C. B.

1903. Animal ecology of the Cold Spring Harbor Sand spit, Decennial Publ. Univ. of Chicago, 10: 157-176.

DAVIS, B. M.

1913. Part I, Section II. Botanical Biological Survey of the waters of Woods Hole and vicinity. Bull. Bur. Fish., 31 (1911): 443-544.

DAWSON, E. Y.

1956. How to know the seaweeds. Wm. C. Brown Co., Dubuque, Iowa.

1960. Symposium: The biogeography of Baja California and adjacent seas. Part II. Marine biotas. A review of the ecology, distribution, and affinities of the benthic flora. Systematic Zoology, 9(3): 93-100.

DE BARY, A.

1884. Comparative anatomy of the vegetative organs of the phanerogams and ferns. Oxford Clarendon Press.

DE LANESSAN.

1875. Organogenie de la fleur et du fruit des Zostera marina L. et Z. nana Roth. Rapports des Zostera avec les Graminees. Assoc. Franc. pour l'Avanc. des Sci., Nantes.

DELPINO, F.

1870. Ulteriori osservazioni et considerazioni sulla disogamia nel regno vegetale II. Soc. Ital. di Sci. Nat. Atti., 13: 167-205.

DELFINO, F., and P. ASCHERSON.

1871. Federico Delpino's Eintheilung der Pflanzen nach dem Mechanismus der dichogamischen Befruchtung und Bemerkungen über die Befruchtungsorgane bei Wasserpflanzen. Metgetheilt und mit einigen zusätzen versehen von. P. Ascherson. Bot. Zeit Jahrg., 29: 443-445, 447-459, 463-467.

DEXTER, R. W.

1944. Ecological significance of the disappearance of eelgrass at Cape Ann, Massachusetts. Jour. Wildl. Mgt. 8(3): 173-176.

1945. A report on the eelgrass situation in the Annisquam (Mass.) and Mystic (Conn.) tidewater rivers in the summer of 1945. Plant Dis. Rept., 29(27): 702-704.

1946. The eelgrass situation in the Annisquam (Mass.) and Mystic (Conn.) tidewater rivers in the summer of 1946. Plant Dis. Rept., 30(11): 424-425.

1947a. Status of eelgrass in the Annisquam tidal river and Menensha saltwater pond in Massachusetts during the summer of 1947. Plant Dis. Rept., 31(11): 448-449.

1947b. The marine communities of a tidal inlet at Cape Ann, Massachusetts: a study in bioecology. Ecol. Monogr., 17(3): 261-294.

1950. Restoration of the Zostera faciation at Cape Ann, Massachusetts. Ecology, 31(2): 286-288.

1951. The eelgrass situation at Cape Ann, Massachusetts, in the summer of 1951. Plant Dis. Rept., 35(11): 507-508.

1953. Recession of eelgrass at Cape Ann, Massachusetts. Ecology, 34(1): 229-231.

DOTY, M. S.

1957. Rocky intertidal surfaces. In Treatise on marine ecology and paleoecology. J. W. Hedgpeth, ed., Geol. Soc. Amer., Memoir, 67.

DRUDE, D. O.

1897. Manual de geographie botanique. Librairie des Sciences Naturelles. 552 p.

DUBY, J. E.

1828. *Botanicon Gallicum seu Synopsis Pantarum in Flora Gallica. Descriptarum.* Ed. secunda, pars prima. Paris.

DUCHARTRE, P.

1872. Quelques observations sur les caracteres antomiques des Zostera et Cymodocea a propos d'une plante trouvée près de Montpellier. *Soc. Bot. de France Bul.*, 19: 289-302.

DUNCAN, F. M.

1933. Disappearance of Zostera marina. *Nature*, 132(3334): 483.

DUVAL-JOUVE, J.

1873. Particularites des Zostera marina L. et Z. nana Roth. *Soc. Bot. de France Bul.*, 20: 81-90.

EAMES, A. J.

1961. Morphology of the Angiosperms. McGraw-Hill Book Co., New York.

EICHLER, A. W.

1875. Bluthendiagramme, erster Theil.

ENGLER, A.

1879. Notiz ueber die Befruchtung von Zostera marina und das wachstum derselben. *Bot. Zeit.*, 37: 654-655.

FALKENBERG, P.

1876. Vergleichende Untersuchungen über den Bau der Vegetationsorgane der Monocotyledonen. Stuttgart.

FARLOW, W. G.

1882. The marine algae of New England. Rept. of U.S. Comm. Fish and Fisheries for 1879 (vol.7), Appendix A, p. 1-210.

FASSETT, N. C.

1928. The vegetation of the estuaries of northeastern North America. *Boston Soc. Nat. Hist.*, Proc., 39(3): 73-130

FERNALD, M. L.

1950. Gray's Manual of Botany. 8th ed. American Book, Co., New York.

FISCHER-PIETTE, E., R. HEIM, and R. LAMI.

1932. Note preliminaire sur une maladie bacterienne des Zosteres.  
Acad. des Sci. Compt. Rend., Paris, 195: 1420-1422.

FISCHER, G.

1907. Die bayerischen Potamogetonen und Zannichellien. Bayer.  
Bot. Gesell. Ber., Munich, 11: 20-162.

FLAHAULT, C.

1908. Zostera, in O. von Kirchener, E. Loew, and C. Schroter.  
Lebensgeschichte der Blütenpflanzen Mitteleuropas, 516-529.

FEYE, T. C. and G. B. RIGG.

Northwest Flora. Univ. Wash. Press, Seattle.

1914. Elementary flora of the northwest, American Book Co.,  
New York.

GESSNER, F.

1959. Hydrobotanik, die physiologischen Grundlagen der  
Pflanzenverbreitung im Wasser. II. Stoffhaushalt. Veb. Deutsch  
Verlag der Wissenschaften, Berlin. 701 p.

GLEASON, H. A.

1952. New Britton and Brown Illustrated Flora. Vol. I, Chas.  
Scribner's Sons, New York.

GOEBEL, K.

1931. Blutenbildung und Sprossgestaltung. Jena.

1933. Organographie der Pflanzen. Jena.

GRAM, K. OG K. JESSEN.

1957. Vilde Planter I Norden. G.E.C. Gads, Kobenhavn.

GRAY, S. F.

1821. A natural arrangement of British plants. Vol. II.  
Baldwin, Cradock & Joy, London.

GRIFFITHS, E.

1922. Some materials of low thermal conductivity. Trans. Faraday Soc., 18: 252-258.

GRONLAND, J.

1851. Beitrag zur Kenntniss der Zostera marina L. Bot. Zeit., 9: 185-192.

HANBURY, F. J.

1925. The London Catalogue of British plants. 11th ed. George Bell & Sons, London.

HANNA, G. D.

1926. Expedition to the Revillagigedo Islands, Mexico, in 1925.  
Proc. Calif. Acad. Scie., 15(4): 1-113.

HARSHBERGER, J. W.

1958. Phytogeographic survey of North America. 2d. ed.  
H. R. Engelmann, Weinheim, Germany.

HARVEY, WILLIAM HENRY.

1852. *Nereis Boreali-Americanus*. Smithsonian Institution,  
Contributions to Knowledge. Part I, p. 31.

HEDGPETH, J. W.

1957. Estuaries and lagoons. II. Biological aspects. In  
Treatise on marine ecology and paleoecology. J. W. Hedgpeth,  
ed., Geol. Soc. Amer., Memoir, 67: 693-729.

HEGI, G.

1909. Illustrierte Flora von MittelEuropa, mit besonderer  
Berucksichtigung von Deutschland, Oesterreich und der Schweiz.  
I. Pteridophyta, Gymnospermae, und Monocotyledones, I. J. F.  
Lehmann's Verlag, Munich.

HEIM, R., and R. LAMI.

1933. La maladie bacterienne des Zosteres: extension et causes favorisantes. Acad. d'Agr. de France, Compt. Rend., 19: 738-742.

HELLER, A. A.

1898. Catalogue of North American plants north of Mexico, exclusive of lower cryptogams.

HENRY, J. K.

1915. Flora of southern British Columbia and Vancouver Island, with many references to Alaska and northern species. W. J. Cage & Co., Toronto.

HISAUCHI, K.

1928. Various facts on Zostera sp. and Typha angustata Bory et Chamb. Jour. Jap. Bot., 5: 28-29.

HOFMEISTER, W.

1852. Zue entwickelungsgeschichte der Zostera. Bot. Zeit., 10: 121-131, 137-149.

HOOKER, J. D.

1884. The student's flora of the British Isles. Macmillan & Co., London.

HOOKER, W. J.

1821. Flora Scotica; or a description of Scottish plants. Part 2. Richard & Arthur Taylor, London.

HOPKINS, S. H.

1957. Interrelations of organisms. B. Parasitism. In Treatise on marine ecology and paleoecology. J. W. Hedgpeth, ed., Geol. Soc. Amer., Memoir, 67: 413-428.

HORNEMANN, J. W.

1816. Icones Plantarum sponte nascentium in regno Daniae, etc. (Flora Danica), 9(26): 1.

HOTCHKISS, N.

1936. Check list of marsh and aquatic plants of the United States.  
U.S. Bur. Biol. Surv., Leaflet BS-72.

1940. Range extensions of marsh and aquatic plants. Rhodora,  
42: 20-22.

HOUT, J. C.

1962. The distribution of eelgrass (Zostera marina). Library  
literature survey, Univ. Alaska, Fairbanks. Mimeo.

HOWE, M. A.

1927. Report on a collection of marine algae made in Hudson Bay.  
Rept. Canad. Arctic Exp., 1913-1918, vol. 4, Bot., pt. B,  
p. 18-30.

HOWELL, T.

1903. A flora of northwest America. Portland, Oregon.

HULTEN, E.

1927. Flora of Kamtchatka and the adjacent islands. I. Pteridophyta,  
Gymnospermae, and Monocotyledonae. Kungl. Svenska Vetensk,  
Hand. Tredje Serien, 5(1).

1937. Flora of the Aleutian Islands. Bokforlags Aktiebolaget  
Thule, Stockholm.

1941-50. Flora of Alaska and the Yukon. C.W.K. Gleerup, Lund,  
Sweden.

1950. Atlas Over Vaxternas Utbredning I Norden. Generalstabens  
Litografiska Anstalts, Stockholm.

1958. Var Svenska flora I Farg. A. Svensk Litteratur, Stockholm.

HUNTSMAN, A. G.

1932. Disease in eelgrass. Biol. Bd. Canada, Progress Reports,  
1932: 11-14.

HURST, B.

1951. A new flora of Prince Edward Island.

HUTCHINSON, J.

1934. Families of flowering plants. Vol. 2. Monocotyledons.  
Oxford, Clarendon Press.

1948. British flowering plants. P. R. Gawthorn, London.

HYLANDER, N.

1953. Nordisk Karlvaxtflora omfattande Sveriges, Norges, Danmarks,  
Ostfennoskandias, Islands och Faroarnas. Almqvist & Wiksell,  
Stockholm.

1955. Forteckning over Nordens Vaxter. I. Karlvaster. Utgiven  
av Lunds Botaniska Forening. C. W. K. Gleerup, Lund, Sweden.

ISHIDA, S.

1939. Plants and Animals. III, 3.

JENSEN, H.

1889. Zostera spiraling. Bot. Tidssk., 17: 162-169.

JENSEN, P. B.

1914. Studies concerning the organic matter of the sea bottom.  
Rept. Danish Biol. Sta., 22: 1-39.

JEPPS, M. W.

1931. Note on a marine Labyrinthula. Jour. Mar. Biol. Assoc. U. K.,  
17: 833-838.

JEPSON, W. L.

1901. A flora of the western middle California. Encina Pub. Co.,  
Berkeley, Calif.

1909-1943. A flora of California. 3 vols., Univ. of California,  
Berkeley.

1925. Flowering plants of California. Univ. of California,  
Berkeley.

JOHNSON, D. S., and A. F. SKUTCH.

1928. Littoral vegetation on a headland of Mt. Desert Island.  
I. Submersible or strictly littoral vegetation. Ecology, 9(2):  
188-215.

JOHNSON, D. S., and H. H. YORK.

1915. The relation of plants to tide-levels, a study of factors affecting the distribution of marine plants at Cold Spring Harbor, Long Island, New York. Carnegie Inst. Wash. Pub. 206.

JOHNSON, T. W., JR., and F. K. SPARROW, JR.

1961. Fungi in oceans and estuaries. J. Cramer, Weinheim.

JONES, G. N.

1936. A botanical survey of the Olympic Peninsula, Washington. Univ. Washington Pub. Bot., 5: 1-286.

JUSSIEU, A. L. De.

1789. Genera Plantarum. Paris. 499 p.

KNOCHE, H.

1921. Flora Balearica, etude phytogeographique sur les Isles Baleares.

KNOWLTON, F. H.

1898. A catalogue of Cretaceous and Tertiary plants of North America. U.S. Geol. Surv., Bull. No. 152

KORIBA, K., and S. MIKI.

1930-31. On the Archeozostera from the Izumi-sandstone. Jap. Jour. Bot., 5: 99.

1931. On the Archeozostera from the Izumi-sandstone, Chikyii, 15: 165-204.

KUNTH, P.

1898-1899. Hand buch der Blutenbiologie.

LAMI, R.

1932. Frequence de quelques algues marines dans le region Malouine en 1932. Laboratoire de St. Servan Bull., Fasc. IV, p. 14-16.

1933. Etat de la flora marine dans la region Malouine en 1933.  
Laboratoire de St. Servan Bull., Fasc. XI, p. 11-13.

1935. Travaux recents sur la maladie des Zosteres. Rev. de  
Bot., Appl. et d'Agr. Trop., 15: 263-266.

LANGE, J.

1887. Conspectus Florae Groenlandicae, pars secunde. Medd. om  
Groenl., 3: 233-446.

LAWRENCE, G. H. M.

1962. Taxonomy of vascular plants. Macmillan Co., New York.

LEHMANN, M. C. G.

1812. The use of grass-wrack for stuffing pillows and mattresses  
and its proper treatment for such purposes as a substitute for  
horse-hair.

LEMAOUT, E., and J. DECAISNE.

1873. A general system of botany (tr. by Mrs. Hooker from Traite  
general de botanique, etc., 1868).

LEWIS, H. F.

1931. The relation of Canada geese and brant to the commercial  
gathering of eelgrass in the St. Lawrence estuary. Can. Field-Nat.,  
45(3): 57-62.

1932. The eelgrass situation on the Atlantic coast. Amer. Game  
Conf. Trans., 19: 411-423.

LEWIS, H. F. and C. COTTAM.

1936. Eelgrass and other waterfowl foods - present status and  
future prospects. North Amer. Wildlife Conf. Proc., p. 498-501.

LEWIS, I. F., and W. R. TAYLOR.

1933. Notes from the Woods Hole Laboratory, 1932. Rhodora,  
35: 147-154.

LIGHT, S. F., R. I. SMITH, F. A. PITELKA, D. P. ABBOTT, and F. M.  
WEESNER

1957. Intertidal invertebrates of the central California coast.  
Univ. of California Press, Berkeley.

LIMBAUGH, C., and F. P. SHEPARD.

1957. Submarine canyons. In Treatise on marine ecology and paleoecology. J. W. Hedgpeth, ed., Geol. Soc. Amer., Memoir, 67: 633-639.

LINNAEUS, C.

1753. Species Plantarum, 2: 968.

LONNBERG, E., and G. GUSTAFSON.

1934. Fran Kristinebergs Zoologiska station sommaren 1934.  
Fauna och Flora, 29: 145-155.

LOUDON, M., G. DON, and D. WOOSTER.

1880. Loudon's Encyclopaedia of plants. Longmans, Green & Co., London.

LOUIS-MARIE, P.

1959. Flore-Manual de la Province de Quebec, Canada. Centre de Psychologie et Pedagogie, Montreal.

LUND, S.

1936. On the production of matter and the growth in some benthic plants. Rept. Danish Biol. Sta., 41: 37-52.

LUTHER, H.

1951. Verbreitung und Okologie der höheren Wasserpflanzen im Brackwasser der Ekenas-gegend in Sudfinnland. Acta Bot. Fennica, 49 & 50.

LYNCH, J., and C. COTTAM.

1947. Status of eelgrass (Zostera marina) on the North Atlantic coast, January 1937. U.S. Bur. Biol. Sur., Leaflet BS-94.

LYNN, M. J.

1936. The scarcity of Zostera marina (slitch, eelgrass or grass-wrack) in Strangford Lough. Irish Nat. Jour., 6: 107-117.

MACGINITIE, G. E.

1939. Littoral marine communities. Amer. Midl. Nat., 21(1): 28-55.

MACGINITIE, G. E., and N. MACGINITIE

1949. Natural history of marine animals. McGraw-Hill Book Co.,  
New York.

MACKIN, J. G.

Eelgrass disease. A review of the literature. H. Rept. Mimeo:  
1-9 w. 3 p bibliography.

MACOUN, J..

1888. Catalogue of Canadian plants. Pt. 4. Montreal.

MAGNUS, P.

1872-73. Die Botanischen Ergebnisse der Nord seefahrt vom  
21 Juli bis 9 September 1872. Ber. d. Komm. zur wissensch.  
Unters. deutschen Meere in Kiel.

MAKINS, F. K.

1957. Concise flora of Britain. 2d ed. Oxford, Clarendon Press.

MARSHALL, N.

1947. Abundance of bay scallops in the absence of eelgrass.  
Ecology, 28: 321-322.

MARTENS, G. VON.

1824. Reise nach Venedig. Ulm.

MARTIN, A. C.

1954. A clue to the eelgrass mystery. In Trans. of 19th North  
American Wildl. Conf., p. 441-449.

MARTIN, A. C. and F. M. UHLER.

1939. Food of game ducks in the United States and Canada. U.S.  
Dept. Agr., Tech. Bull. 634. Reprinted 1951 as U.S. Fish  
and Wildlife Serv. Research Rept. 30.

MASON, H. L.

1957. A flora of the marshes of California. Univ. of California Press, Berkeley.

MCATEE, W. L.

1939a. Wildlife food plants, their value, propagation, and management. Collegiate Press, Ames, Iowa.

1939b. Wildlife of the Atlantic coast salt marshes. U.S. Dept. Agr., Circular 520. 28 p.

MIKI, S.

1932. On the seagrasses new to Japan. Bot. Mag. (Tokyo), 46: 774-788.

1933. On the seagrasses in Japan. I. Zostera and Phyllospadix, with special reference to morphological and ecological characters. Bot. Mag. (Tokyo), 47: 842-862.

1934. On the seagrasses in Japan. III. General consideration on the Japanese seagrasses. Bot. Mag. (Tokyo), 48: 171-178.

MILNE, L. J., and M. J. MILNE.

1951. The eelgrass catastrophe. Scientific American, 184(1): 52-55.

MOFFITT, J.

1931-40. First to tenth annual censuses of black sea brant in California. California Fish and Game, vols. 17-26.

MOFFITT, J., and C. COTTAM.

1941. Eelgrass depletion on the Pacific coast and its effect upon black brant. U.S. Fish and Wildl. Serv., Wildlife Leaflet 204, 26 p.

MOLANDER, A. R.

1933. Anteckningar till Zosteravegetationens forekonst vid västkusten. Ny Svensk Fisk. Tidskr., 18: 207-208.

MOLDENKE, H. N.

1940. Marine flowering plants. Torreya, 40: 120-124.

MOLINIER, R., and J. PICARD.

1951. Biologie des Herbiers de Zosteracees des cotes francaises de la Mediterranee. Comp. Rend. Acad. Sci., Paris, 233.

1952. Recherches sur les herbiers de phanerogames marines du littoral Mediterraneen Francais. Ann. Inst. Oceanogr., 27(3): 157-234.

MOORE, H. B.

1958. Marine ecology. John Wiley & Sons, Inc., New York.

MORONG, T.

1886. Naiadaceae in the Torrey Herbarium. Bull. Torrey Bot. Club, 13(9): 153-162.

1893. The Naiadaceae of North America. Mem. Torrey Bot. Club, 3(2): 1-65.

MOUL, E. T., and R. W. BROWN.

1957. Nonalgal marine plants. In Treatise on marine ecology and paleoecology. J. W. Hedgpeth, ed., Geol. Soc. Amer., Memoir, 67: 1051-1058.

MOUNCE, I.

1934. Disease in eelgrass. Biol. Bd. Canada, Progress Reports, 1933. p. 26.

MOUNCE, I., and W. W. DIEHL.

1934. Note on a new Ophiobolus on eelgrass. Canad. Jour. Res., 11: 242-246.

MUENSCHER, W. L. C.

1915. A study of the algal associations of San Juan Island. Puget Sound Mar. Sta. Pub., 1(9): 58-84.

1944. Aquatic plants of the United States. Comstock, Ithaca, N.Y.

MUNZ, P. A., and D. D. KECK.

1959. A California flora. Univ. of California, Berkeley.

NAKAI, T.

1916. Zostera in Japan. Bot. Mag. (Tokyo), 30: 57.

NAKAMURA, C.

1941. Proceedings of the Institute of Fisheries, 8: 3-4.

NASR, A. H., and A. A. ALEEM.

1949. Ecological studies on some marine algae from Alexandria. Hydrobiologia, 1(3): 251-281.

NELSON, T. C.

1924. Food and feeding of the oyster. New Jersey Expt. Sta. Rept. 1923, p. 197-198.

1947. Some contributions from the land in determining conditions of life in the sea. Ecol. Monogr., 17(3): 337-346.

NEWELL, N. D.

1963. Crises in the history of life. Scientific American, 208(2): 76-92.

#### OKAYAMO PREFECTURE EXPERIMENTAL FISHERIES STATION

1922-23. Report on the Investigation of the Ecology of "Moba" and Fish. 1-4.

OSTENFELD, C. H.

1902. Flora Arctica, pt. 1. Copenhagen.

1905. Preliminary remarks on the distribution and biology of the Zostera of the Danish seas. Bot. Tidsskr., 27: 123-125.

1908. On the ecology and distribution of the grass-wrack (Zostera marina) in Danish waters. Rept. Danish Biol. Sta., No. 16, p. 62.

1914. On the geographical distribution of the seagrasses. Proc. Roy. Soc. Victoria, 27(n.s.): 179-190.

1927. Meeresgraser. In Die Pflanzenreale. II. Marine Potamogetonaceae, 1(4): 46-50.

OUTRAM, D. N.

1957. Guide to marine vegetation encountered during herring spawn surveys in southern British Columbia. Fisheries Research Board of Canada, Biol. Sta. Cir. 44, 3 p.

PATTERSON, H. N.

1892. Numbered check-list of North American plants. Oquawka, Ill.

PECK, M. E.

1961. A manual of the higher plants of Oregon. Binfords & Mort, Portland.

PENHALLOW, D. P.

1896-97. Contributions to the Pleistocene flora of Canada. Trans. Roy. Soc. Canada, 2d. ser. II, sect. IV: 59-77.

1898. Committee, Canadian pleistocene Flora and Fauna, Brit. Assoc. Adv. Sci., p. 522-529.

PERRING, F. H., and M. WALTERS.

1962. Atlas of the British flora. Bot. Soc. Brit. Isles. Thos. Nelson & Sons, London. 432 p.

PETERSEN, C. G. J.

1891. Fiskenes biologiske Forhold i Holbaek Fjord. Rept. Danish Biol. Sta., 1: 1-63.

1893a. The pelagic life in Faeno Sound. Rept. Danish Biol. Sta., 3: 1-38.

1893b. Det videnskabelige Udbytte af Kanonbaaden Hauchs Togter. Kobenhavn.

1900. List of the "Aalerusestader" in Denmark. Rept. Danish Biol. Sta., 10: 1-37.

1912. Über Menge und Jaresprodktion der Benthospflanzen an den westeuropäischen Kusten. Gnt. Rev. d. ges. Hydrobiol. in Hydrographie, p. 47-52.

1913. Valuation of the sea. II. The animal communities of the sea bottom and their importance for marine zoogeography. Rept. Danish Biol. Sta., 21: 1-44.

1914a. Studies concerning the organic matter of the sea bottom.  
Rept. Danish Biol. Sta., 22: 1-39.

1914b. Appendix of report 21: 1-7. Rept. Danish Biol. Sta.,  
22: 89-96.

1914c. Om Baendeltangens (Zostera marina) Aarsproduction de  
danske Farvande. Mindeskr. Steenstr. Fds. Kbh.

1915a. On the animal communities of the sea bottom in Skagerak,  
the Christiania Fjord and the Danish waters. Rept. Danish  
Biol. Sta., 23(1915): 29-32.

1918. The sea bottom and its production of fish food. A survey  
on the work done in connection with valuation of the Danish  
waters from 1883-1917. Rept. Danish Biol. Sta., 25: 1-82.

PETERSEN, C. G. J., and P. BOYSEN JENSEN.

1911. Valuation of the sea. I. Animal life of the sea bottom,  
its food and quantity. Rept. Danish Biol. Sta., 20: 1-81.

PETERSEN, C. G. J., and J. A. L. LEWISOHN.

1899. Trawlings in the Skagerack and the northern Cattegat in  
1897 and 1898. Rept. Danish Biol. Sta., 9: 1-56.

PETERSEN, H. E.

1933. Wasting disease of eelgrass (Zostera marina). Nature,  
132: 1004.

1934a. Wasting disease of eelgrass. Nature, 134: 143.

1934b. Studies on a parasitic fungus in the eelgrass, Zostera  
marina L. Saetryk Af Bot. Tid., 43: 1.

1935. Preliminary report on the disease of the eelgrass (Zostera  
marina L.). Rept. Danish Biol Sta., 40: 1-8.

1936. Studies on a parasitic fungus in the eelgrass, Zostera  
marina L. Bot. Tidsskr., 43: 1-9.

PIPER, C. V.

1906. Flora of the State of Washington. Contrib. U.S. Nat.  
Herb., Smithsonian Inst., U.S. Nat. Mus. Vol. II.

PIPER, C. V., and R. K. BEATTIE.

1915. Flora of the northwest coast. New Era Print. Co.,  
Lancaster, Pa.

POLUNIN, N.

1959. Circumpolar Arctic flora. Oxford, Clarendon Press.

1960. Introduction to plant geography and some related sciences.  
Longmans, Green & Co., London.

POND, RAYMOND H.

1905. Biological relation of aquatic plants to the substratum.  
U.S. Fish Commission Rept. for 1904, p. 483-526.

PORSILD, A. E.

1932. Occurrence of Zostera and Zannichellia in Arctic North  
America. Rhodora, 34(401): 90-94.

PORTER, C. L.

1959. Taxonomy of flowering plants. W. H. Freeman & Co.,  
San Francisco, Calif.

POST, T. V., and O. KUNTZE.

1903. Lexicon Generum Phanerogamerum. Deutsche Verlags-Anstalt,  
Stuttgart.

POTONIE, H.

1913a. Illustrierte Flora von Nord- und Mitteldeutschland.  
Text. Sechste Auflage. G. Fischer, Jena.

1913b. Illustrierte Flora von Nord- und Mitteldeutschland.  
Atlas. Sechste Auflage. G. Fischer, Jena.

POTTIER, J.

1929. Etude sur les possibilités d'utilisation des plantes  
marines tunisiennes pour la nourriture du bœuf. Ann. de  
l'Institut oceanographique, nouv. ser., t. 6, fasc. 3.

PRAT, A.

1873. The flowering plants, grasses, sedges, and ferns of Great Britain, and their allies the club mosses, papierworts and horsetails. Vol. V. Frederick Warne & Co., London.

PRAT, H.

1935. Notes botaniques sur l'Archipel des Bermudes. Bull. Soc. Bot. France, 82: 162-168.

PRILLIEUX, E.

1864. Recherches sur la vegetation et la structure de l'Althenia filiformis Petit. Ann. d. sci. Nat., Ser. 5, Bot. T., 2: 169-190.

RAND, E. L., and J. H. REDFIELD.

1894. Flora of Mount Desert Island, Maine. A preliminary catalogue of the plants growing on Mount Desert and the adjacent islands. Cambridge Univ. Press.

RAUNKIAER, C.

1895-99. De danske blomsterplanters naturhistorie, vol. 1.

REICHENBACH, H. G. L.

1845. Icones florae germanicae et helvatiae, vol. 7.

REID, G. K.

1961. Ecology of inland waters and estuaries. Reinhold Pub. Corp., New York.

REIN

1873. Ueber die vegetations - Verhaltnisse der Bermudas - Inseln. Jour. Linn. Soc., 14.

REINKE, J.

1889. Algenflora der westlichen Ostsee deutschen Anteils (b, Bericht der Komm. zur wissensch. der deutschen meere in Kiel).

RENDLE, A. B.

1959. The classification of flowering plants. I. Gymnosperms & Monocotyledons. Cambridge Univ. Press.

RENN, C. E.

1934. Wasting disease of Zostera in American waters. Nature, 134(3385): 416.

1935. A mycetozoan parasite of Zostera marina. Nature, 135: 544-545.

1936a. The wasting disease of Zostera marina. Biol. Bull., 70: 148-158.

1936b. Persistence of the eelgrass disease and parasite on the American Atlantic coast. Nature, 138: 507-508.

1937. The eelgrass situation along the middle Atlantic coast. Ecology, 18: 323-325.

RENOUF, L. P. W.

1934. Zostera disease on the coast of County Cork, I.F.S. Nature, 133(3373): 912.

RICKETTS, E. F., and J. CALVIN.

1952. Between Pacific tides. Stanford Univ. Press.

RIGG, G. B., and R. C. MILLER.

1949. Intertidal plant and animal zonation in the vicinity of Neah Bay, Washington. Proc. Calif. Acad. Sci., 4th Ser., 26: 323-351.

ROSENBERG, O.

1901a. Ueber die embryologie von Zostera marina L. Bih. Sv. Vet.-Akad. Handl. 27(3): No. 6.

1901b. Ueber die pollenbildung von Zostera. Medd. fr. Stockholms Hogskolas Bot. Inst.

ROSENDAHL, C. O.

1906. Observations on plant distribution in Renfrew district of Vancouver Island. Postelsia, p. 3-132.

SAMUELSSON, G.

1934. Die Verbreitung der höheren Wasserpflanzen in Nordeuropa  
(Fennoskandien and Danemark). Acta Phytogeographica Suecica.  
Uppsala.

SAUVAGEAU, C.

1889. Contribution a l'étude du Système mécanique dans la racine  
des plantes aquatiques, les Zostera, Cymodocea, et Posidonia.  
Jour. de Bot., 3: 181-196.

1890. Observations sur la structure des feuilles des plantes  
aquatiques: Zostera, Cymodocea et Posidonia. Jour. de Bot.,  
3: 169-181.

1891a. Sur les feuilles de quelques Monocotyledones aquatiques.  
Ann. Soc. Nat. Bot., t. 7, Ser. 13, p. 103-296.

1891b. Sur la tige des Zostera. Jour. de Bot., 5: 33-45, 59-68.

SCAGEL, R. F.

1957. An annotated list of the marine algae of British Columbia  
and northern Washington. Dept. Northern Affairs and Nat. Res.  
Nat. Mus. Canada, Bull. No. 150. Ottawa.

1961. Marine plant resources of British Columbia. Fish. Res.  
Bd. Canada, Full. 127.

SCHEFFER, T. H., and N. HOTCHKISS.

1945. Plant food resources for waterfowl in the Pacific northwest.  
State of Washington Dept. of Game Biol. Bull., No. 7: 1-39.

SCHIMPER, A. F. W.

1903. Plant geography upon a physiological basis. Oxford,  
Clarendon Press.

SCHMITT.

1904. Monographie de l'Ile d'Anticosti.

SCHUEBELER, F. C.

1873. Die Pflanzenwelt Norwegens. Ein Beitrag zur natur- und  
culturgeschichte Nordeuropas, Allgemeiner Theil (see Bot.  
Jahresber., vol. 2, p. 1135: 1876).

SCHUMANN, K.

1892. Morphologische Studien, Heft 1.

SEGERSTRALE, S. G.

1957. Baltic Sea. In Treatise on marine ecology and paleoecology.  
J. W. Hedgpeth, ed., Geol. Soc. Amer., Memoir, 67: 751-800.

SETCHELL, W. A.

1920. Geographical distribution of the marine spermatophytes.  
Bull. Torrey Bot. Club, 47: 563-579.

1922. Zostera marina and its relation to temperature.  
Science, 56: 575-577.

1927. Zostera marina latifolia: ecad or ecotype? Bull. Torr.  
Bot. Club, 54: 1-6.

1929. Morphological and phenological notes on Zostera marina L.  
Univ. Calif. Pub. Bot., 14: 389-452.

1933. A preliminary survey of the species of Zostera. Natl.  
Acad. Sci. Proc., 19: 810-817.

1934. Marine plants and Pacific paleogeography. Fifth Pacific  
Sci. Cong. Proc. (1933), 4: 3117-3131.

1935. Geographic elements of the marine flora of the North Pacific  
Ocean. Amer. Nat., 69(725): 560-577.

SETCHELL, W. A., and M. G. WATSON.

1920. Das wachstum der Zostera marina L. Ber. deutsch bot.  
Gesell., 38: 187-192.

SHALER, N. S.

1885. Sea coast swamps of the eastern United States. U.S. Geol.  
Surv., Ann. Rept., 6:359-398.

SHELFORD, V. E., A. O. WEESE, L. A. RICE, D. I. RASMUSSEN, and  
A. MACLEAN.

1935. Some marine biotic communities of the Pacific coast of  
North America. Ecol. Monog., 5: 249-354.

SHREVE, F., M. A. CHRYSLER, F. H. BLODGETT, and F. W. BESLEY.

1911. The plant life of Maryland. Maryland Weather Serv.  
Spec. Pub., III.

SPIERENBURG, D.

1933. Een ziekten in het seegras (Zostera marina L.). Tijdschr.  
over Plantenziekten, 39: 193-199.

STAUFFER, R. C.

1937. Changes in the invertebrate community of a lagoon after  
disappearance of the eelgrass. Ecology, 18: 427-431.

STEPHENSON, T. A., and A STEPHENSON.

1954a. Life between tide marks in North America. IIIA. Nova  
Scotia and Prince Edward Island: description of the region.  
Journ. Ecol., 42(1): 14-45.

1954b. Life between tide marks in North America. IIIB. Nova  
Scotia and Prince Edward Island: The geographical features  
of the region. Jour. Ecol., 42(1): 46-70.

STEVENS, N. E.

1933. Disappearance of Zostera marina along the Atlantic coast  
of North America. Internat'l. Bull. Plant Protect., 7: 195-196.

1935. Notes on Zostera marina in Upper Buzzards Bay, Massachusetts.  
Plant Dis. Rept., 19(4): 232-233.

1936a. Environmental conditions and the wasting disease of  
eelgrass. Science, 84: 87-89.

1936b. Notes on the condition of Zostera marina in Buttermilk Bay,  
Massachusetts. Plant Dis. Rept., 20: 279-281.

1939. Environmental factors and the wasting disease of eelgrass.  
Rhodora, 41: 260-262.

STEVENS, N. E., H. R. ELLIS, and R. B. STEVENS.

1950. Wasting and recovery of Zostera marina on the Atlantic  
coast of the United States. Plant Dis. Rept., 34(12): 357-362.

STEWARD, A. N., L. R. DENNIS, and H. M. GILKEY.

1960. Aquatic plants of the Pacific northwest. Stud. in Bot., No. 11. Oregon State College, Corvallis.

SVERDRUP, H. U., M. W. JOHNSON, and R. H. FLEMING

1942. The Oceans. Prentice-Hall, Inc.

TAKHTZJIAN, A. L.

1954. Origins of angiospermous plants. Soviet Sciences Press.  
(Translated by Mrs. Olga Hess Gankin).

TANSLEY, A. G.

1949. The British Isles and their vegetation. Vol. II.  
Cambridge University Press.

TAYLOR, A. R. A.

1954. Control of eelgrass in oyster culture areas. Fish. Res. Bd. Canada, Atlantic Biol. Sta., General Series, No. 23.

1957a. Studies of the development of Zostera marina L.  
I. The embryo and seed. Can. Jour. Bot., 35: 477-499.

1957b. Studies of the development of Zostera marina L.  
II. Germination and seedling development. Can. Jour. Bot., 35: 681-695.

TAYLOR, N.

1909. Zosteraceae. In North American Flora, 17: 29-30.

TAYLOR, W. R.

1933. Disappearance of Zostera in 1932. Rhodora, 35: 152-154.

1957. Marine algae of the northeastern coast of North America.  
Univ. of Michigan Press, Ann Arbor.

TERMIER, H., and G. TERMIER.

1951. Les herbiers marins et la signification des faunes pyritenses. La Revue Scientifique, No. 3309.

TOKIDA, I.

1945. Monthly Bulletin of Hokushuishi, II: 3-4, 5-6.

TORREY, J.

1826. Compendium of the flora of the northern and middle states containing generic and specific descriptions of all the plants, exclusive of the cryptogamia, hitherto found in the United States, north of the Potomac. Stacey B. Collins, New York.

TRANSEAU, E. N.

1913. The vegetation of Cold Spring Harbor, Long Island. I. The littoral successions. The Plant World, 16(7): 189-209.

TUTIN, T. G.

1934. The fungus on Zostera marina. Nature, 134(3389): 573.

1936. New species of Zostera from Britain. Jour. Bot. Lond., 74: 227.

1938. The autecology of Zostera marina in relation to its wasting disease. New Phytol., 37: 50-71.

1942. Zostera. Jour. Ecol., 30: 217-226.

UPHOF, J. C.

1941. Halophytes. Bot. Rev., 1(9): 17.

VAN DER WERFF, A.

1938. A new parasitic organism in Zostera marina. Chron. Bot., 4: 498-499.

VAN GOOR, A. C. J.

1920. Das wachstum der Zostera marina L. Deutsch Bot. Gesell. Ber., 38: 187-192.

VIDEMENT, E.

1909. Les herbes marines. Dissertation. Saint-Brieuc.

WAHLENBERG, G.

1826. Flora Suecica enumerans Plantas Sueciae Indigenas. Post Linnaeum Edita. Upsaliae.

WALSINGHAM, L., and R. PAYNE-GALLWEY.

1886. Shooting (Moor and Marsh). Badminton Library, London.

WARMING, E.

1871. Forgreningen hos Pontederiaceae og. Zostera. Vidensk.  
Medd. fra den Natur. Forening i Kjobenhavn for Aaret,  
p. 342-346.

1890. Botaniske Exkursioner. I. Fra Vesterharskystens Marskegne.  
Saertryk af Vidensk. Medd. fra den Natur. Forening i Kjobenhavn.

1906. Dansk plantevaekst, 1. Stransvegetation.

WATSON, S.

1880. Botany, Vol. II. Geol. Surv. of California. Boston.

1891. Contributions to American Botany. SVIII. Proc. Amer.  
Acad., 26: 124-163.

WATSON, S. W., and E. J. ORDAL.

1951. Studies on Labyrinthula. Tech. Rept. No. 3, Univ. of  
Washington Oceanogr. Lab., 37 p. (mimeo).

1957. Cultural and cytological studies on species of  
Labyrinthula. 165 p., addendum, p. 1, 2. Doctoral  
dissertation. Univ. of Wisconsin, Madison.

WEBB, D. A.

1959. An Irish flora. Dundalgan Press, Ltd., Dundalk.

WETTSTEIN, R.

1924. Handbuch der Systematischen Botanik, 2: 583.

WILLIAMS, J. E.

1959. A quantitative study of the Zostera marina population of  
the York River, Virginia. Nat. Sci. Found. Program, Virginia  
Fish. Lab., 15 June 1959 to Sept. 1959.

WILLIS, J. C.

1951. A dictionary of the flowering plants and ferns. 6th ed.  
Cambridge Univ. Press.

WILSON, D. P.

1935. Life of the shore and shallow sea. London.  
1949. The decline of Zostera marina L. at Salcombe and its effects on the shore. Jour. Mar. Biol. Assoc. U.K., 28: 395-412.

WINKLER, L. R., and E. Y. DAWSON

1963. Observations and experiments on the food habits of California sea hares of the genus Aplysia. Pacific Science, 17(1): 102-105.

WOHLENBERG, E.

1935. Beobachtungen über das Seegras, Zostera marina L. und seine Erkrankung im Nordfriesischen Wattenmeer. Beitr. zur Heimatforsch. in Schleswig-Holstein, Hamburg, und Lübeck, 2.

YOCOM, C. F.

1951. Waterfowl and their food plants in Washington. Univ. of Washington Press, Seattle.

YOUNG, E. L.

1937. Notes on the labyrinthulan parasite of the eelgrass Zostera marina. Bull. Mt. Desert Island Biol. Lab., p. 33-35.

1938a. Recent investigations on the eelgrass problem. Bull. Mt. Desert Island Biol. Lab., 1938: 26-28.

1938b. Labyrinthula on Pacific coast eelgrass. Canad. Jour. Res., 16: 115-117.

1943. Studies on Labyrinthula, the etiologic agent of the wasting disease of eelgrass. Amer. Jour. Bot., 30: 586-593.

ZENKEVICH, L. A.

1957. Caspian and Aral Seas. In Treatise on marine ecology and paleoecology. J. W. Hedgpeth, ed., Geol. Soc. Amer. Memoir, 67: 891-916.

ZOBELL, C. E.

1946. Marine microbiology. A monograph on hydro-bacteriology. *Chronica Botanica Co.*, Waltham, Mass.

ZOBELL, C. E., and C. B. FELTHAM.

1942. The bacterial flora of a marine mud flat as an ecological factor. *Ecology*, 23: 69-78.

ZOPF, W.

1892. Zur Kenntnis der Labyrinthuleen, einer Familie der Mycetozoen. *Beitr. Physiol. Morph. niederer Organismen*, 2: 36-48.

The Department of the Interior, created in 1849, is our Nation's Department of Natural Resources, concerned with management, conservation, and development of water, wildlife, fish, mineral, forest, and park and recreational resources. It also has major responsibilities for Indian and Territorial affairs.

As America's principal conservation agency, the Department works to assure that nonrenewable resources are developed and used wisely, that park and recreational resources are conserved for the future, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States, now and in the future.



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